

MULTIPLE TORCH-MULTIPLE TARGET METHOD AND APPARATUS FOR PLASMA OUTSIDE CHEMICAL VAPOR DEPOSITION

ABSTRACT OF THE DISCLOSURE

5

A plurality of glass deposition targets are rotated simultaneously and a first plasma torch, having a coil diameter larger than the sum of the target diameters, deposits glass simultaneously on the plurality. After the diameter of the targets reaches a threshold a second plasma torch is used. The diameter of the second plasma torch can provide for simultaneous deposition. In a further embodiment, after the target diameter reaches a second threshold a third plasma torch is used. In a further embodiment the spacing between the axes of rotation of the targets is widened as the target diameter increases. In a still further embodiment a single plasma torch includes movable concentric tubes within its coil to selectively operate as any of a plurality of different diameter plasma torches.

20